

DISSERTATION.

Exploring ways of conceptualizing ASD in other parts of the world.

Questioning the cultural sensitivity of the DSM.

Hyman Percival

Exploring research findings of ASD etiology and epidemiology in non-western cultures in developing countries. This will determine whether the DSM is culturally sensitive to other parts of the world. Does the DSM take into account different conceptual social constructs of mental health from diverse cultures? The manual mentions that professionals should take into account the patients social and cultural surrounds when making a diagnosis of a mental disorder but really is that enough to become a revolutionary universal tool?

Table of Contents

Chapter 1: INTRODUCTION	1
Background of the research.....	1
Aims and objectives of the research.....	4
Research Methodology.....	5
CHAPTER 2:	7
DIAGNOSTIC STATISTICAL MANUAL OF MENTAL DISORDERS	7
The History and revisions of the DSM.....	8
DSM-I (1952)	8
DSM-II (1968), (1974).....	9
DSM-III (1980), DSM-III-R (1987)	9
DSM-IV (1994), DSM-IV-TR (2000),	10
DSM-5 (2013); Perspective of ADS ‘Neuro-developmental Disorders’ and Criteria	12
International Classification of Diseases-10 and its difference with DSM	18
Western mainstream approach of Autism spectrum disorders (ASD)	20
The founding fathers of Autism.....	21
Challenges and Criticism of the DSM in the West.....	25

Misdiagnosing of Women; Wing and Gould (2011) ‘triad of impairments’ DSM IV vs. DSM-V	25
International Classification of Diseases-10	26
Reliability and Validity of the DSM	26
Cultural Bias	27
CHAPTER 3: LITERATURE REVIEW - DIFFERENT CULTURAL CONSTRUCTION OF AUTISTIC SPECTRUM DISORDERS	28
Global perspective about Autistic Spectrum disorder	28
African research on ASD	29
Explanatory models of mental health in Sub Saharan Africa	34
Co-Morbidity	35
Cultural influences/factors that may affect prevalence rates of ASD in Africa	36
Autism spectrum disorders in Iran.....	38
CHAPTER 4: CULTURE AND CULTURAL CRITICISMS OF THE WESTERNERS DSM	40
Culture	40
Culture as a discourse.....	41
Social constructionist theory and culture	42
The Debate by Culture	43

Psychiatric Classification and Nature of Mental Illness	47
Position Found	50
Problem with the DSM-III lack of cultural sensitivity	52
CHAPTER 5: CONCLUSION	57
REFERENCES	59

Chapter 1: INTRODUCTION

Background of the research

Autism is not a single disorder but a spectrum of problems, ranging in intensity and type. Autism is a syndrome characterized by changes present from a very early age, typically before the age of three, and that is always characterized by qualitative shifts in communication, social interaction and the use of imagination. Autistic spectrum disorder has not been proven to affect all people from every country and from every culture, but all over the world prevalence rates are inconsistent. Due to the lack of health facilities and the country's economic status, they are not able to see opportunity and social change in their community (Widiger and Samuel, 2005, p. 494). Professional who choose to work in developing countries, are not able to help a lot of the developing world. Sierra Leone is one of those developing countries which were devastated by the civil war and to this day the people are struggling to survive. Some individuals believe the country is 'cursed' as many other African countries have strived for improvement and success in developing their country like Nigeria and Ghana.

However, Sierra Leone remains the same and many use the word 'un-progressive'. This country was once colonised by the British and is one of the most resourceful countries in the world and yet the common civilian is treated and lives like an animal. After the 10 year civil war which ended in 2002, the amount of trauma that the civilians would have suffered is indescribable and yet, it is also noticed that there were no one mental counselling service and mental health facility to help enable these people. They only have the general hospital. To the local, depression, post-traumatic stress, ADHD and Autistic spectrum disorders do not exist.

Although it has been proven in many other African countries that these mental disorders do exist, how can the DSM be applied to a culture to which their belief system believes mental health doesn't exist? A lot of their explanations to mental health in a lot of

African countries are seen to be demonic, evil and referenced to stupidity. They believe in wrong doings and 'sins of the father' sayings. Their explanations are spiritual and the community or public do not require the knowledge and awareness in terms of dealing with this complex area of health. The individual sufferers of mental disorders have no place in society and are left at home with their families or are out on the streets. This research revealed that how can the DSM be able to reflect positively across Sierra-Leone culture and take into account the countries historical devastation of the civil war when determining positive diagnosis of a mental disorder? And the emphasis of the research was on the importance of cultural community based interventions and tools are crucial.

This research work is based on introduction of research, five different chapters and discussion and conclusion. The matter being discussed for this research topic focuses on the DSM and its current impact within the psychiatry realm. The outline of the research is given below:

Chapter 1- transformation of the six revisions of the DSM

Chapter 2- literature on the ways of culture construction of Autistic spectrum disorders all over the world (more on Africa)

Chapter 3-Critic of the DSM

Chapter 4- Proposal project for Sierra Leone

Chapter 5- community psychology, culture and theories of culture social constructionism

The first chapter entails information on the diagnostic statistical manual which is designed to carry criteria for all types of mental disorders; this revolutionary tool has gone through many social transformations to keep up with relevant and modern changes being made throughout modern society and civilization. This clinical tool or guide has been used prominently around the world with diverse nature and cultures. However, researchers

question the cultural sensitivity of this revolutionary tool. What this research will explore is the cultural transformations that psychiatry had to endeavour in order to produce a more culturally sensitive manual to positively diagnosis a mental disorders in different non-western countries. In this case we will be investigating the complex and extraordinary disorder of the autistic spectrum. This research begins with the history of the six revisions of the DSM and its 'objective' characteristics that display the symptoms of each disorder made by the American Psychiatric Association (APA) and the DSM task force. Researcher then take a look at the western approach of the autistic spectrum disorder and the prevalence rates among the and framework describing symptoms and features of autistic disorders like Aspergers syndrome and perspectives of the finding fathers of autism such as Leo Kanner and Hans Asperger.

This research study will also look at view points from other researcher's criticisms of the West and its structure of the triad of impairments of autism and the vast changes of the new current DSM-V, which recently was released in May 2013, and its efforts with trying to make the DSM more culturally sensitive as explained by Arthur Kleinman one of members of the DSM task force. Due to its recent release of the DSM-V, a lot of the research collected was mainly based on the DSM-IV-TR, which went through the revolutionary changes of trying to include cultural differences. However, we still look at the DSM-V and its improvements in sensitivity also. This piece sets out to critic the DSM through the west and questions its validity, reliability and structure of the manual and the contrasting differences between the ICD-10 and the DSM-IV-TR.

In order to find out whether the DSM was culturally sensitive to diverse cultural differences to the west, research was collected from the developing worlds to find out how nations like Africa in particular, conceptualizes mental health and their explanations and studies emphasizing on cultural differences. It mentions the highlights of prevalence rates of

autistic spectrum disorders across the globe and research on ASD found in developing countries like Iran and Africa.

With the collection of findings amongst developing countries that use the DSM to diagnose ASD, this piece emphasizes not only cultural factors which may cause an effect on a positive diagnosis of the DSM, but social context of mental health in African society and problems with funding and MH facilities and implementation to mental health policies. The question is, will professionals be able to enable cultural sensitivity without having to use subjectivity for the DSM? As it is known to be clinically objective, is the DSM only useful in providing a framework for health professionals to use as a guide to help to determine diagnosis in a combination of using measurement tools which, will enhance or include important cultural factors best suited or relatable to that specific country? Demographic insight and information on the history of the country and economic status is widely considered when health professionals are working in developing countries as the lack of funding and human resources are scarce making living conditions extremely difficult.

Strategies of community psychology and community based research in non-western countries work considerable well as where the government infrastructure fails, through community groups and institutions, it gives people in the communities the tools they need for empowerment. Community psychology emphasizes the importance of culture and there will be a chapter defining culture and the importance of it being able to influences all aspects of our everyday lives. Also mentioning theories of culture and social constructionist theories that help to explain and determine how mental health is socially constructed within society.

Aims and objectives of the research

The main aim of this research study was to analyse and explore whether the DSM is culturally sensitive to diversity across cultures. In order to attain the aims of the research, there are some other objectives of the research which are given below:

- To critically appraise the DSM-IV and the DSM-V on its cultural sensitivity in non-western culture
- To explore the DSM's social transformations throughout the six revisions in terms of its structure, categorization, social stigma and discovery of new mental disorders
- Exploring the western approach of ASD through research and the perspectives of founding fathers of autism
- Investigating African research of ASD and exploring their concept of mental health and social construction and explanations of the complex autistic spectrum disorders
- To mention the importance of cultural influences when determining a diagnosis of ASD and the uses of community psychology
- Presenting a case of community based tools enabling alternative ways diagnosing ASD in the reflection of the Sierra Leone cultural community and taking into account its socio-economic status.

Research Methodology

The research study was conducted by gathering and collecting the information from the secondary sources like different articles and researches related to the research topic. Research methodology also expanded on the elements of the research design in particular, and towards the approach of the proposed research. The purpose of this secondary research is to assess the concept whether the DSM is culturally sensitive to diversity across cultures. In this particular research, the research adopted the secondary qualitative research method in order to attain the most effective and useful information. Qualitative method for research comprise of the information and data that is non-quantifiable and therefore cannot be measured and valued in numerical values. Secondary research is able to enhance the understanding of the research topic and discussion. It is considered as the most effective

method to acquire factual and accurate information from variety of researches and articles.

Collection of secondary data for this study enabled the researcher to enhance the understanding of the issue and acquire the best outcomes for the study.

The proper use of secondary information and data like books and journals also assisted the researcher of the study in collecting the proper useful information. Most of the research content is from books and journals which have established matter (Silver, 2013, p. 232). Since this dissertation is mostly organisation based, the studies and investigations conducted by number of researchers also helped to attain the enhanced external information and understanding. The outcomes derived were also based on the contrasting and comparing concepts of number of journals utilized in the study. Both public and private libraries have been accessed for this research. These libraries are ProQuest, Jstor, Emerald, Oxford and Phoenix. Furthermore, the accumulation of the secondary information is comparatively very less time consuming as compare to the collection of primary data. However, it is important for the researcher to assess the validity and reliability of the secondary that has been collected from various authentic sources (Barnett-Page and Thomas, 2009, p.59).

The researcher for this particular study used the content analysis technique in order to analyse and further interpret the collected information. With the help of content analysis technique, researcher can firstly completely comprehend and understand the information and after complete understanding the researcher interpret the collected information in most effective and efficient manner. Using the content analysis technique the researcher can drive the outcomes of the study by analysing the collected data and analysis of collected secondary data enables the researcher to enhance the understanding of the research topic. Thus, content analysis technique was used by the researcher for this particular study to analyse the secondary research.

CHAPTER 2:

DIAGNOSTIC STATISTICAL MANUAL OF MENTAL DISORDERS

It can be disputed that the processes constructs recognised in the Western psychology have either falsified or ignored a relation of the life true nature in a society of non- Western. For instance the phrase “attitude” may be an altered construct in a distinctive and unique culture from what it would be in a communalist one. This is considered as an illustration of how diverse forms of suppositions and postulations linked with constructs that can direct towards of difficulties of management and cultural conflicts if there is a shortage of awareness of these forms of differences (Brown and Barlow, 2005, p.551). Euro- American psychology as with other organisations has experienced and undergo from a type of ethnocentrism which basically support and strengthen the power and dominance of different practices of Western management. Civic release as supported and maintained in the society of West maintains a social structure that encourages and upholds the protection and existence of the people, such as the freedom on the individual basis, self-actualisation and right of choice. It is apparent and obvious that the psychology of West and America are introduced with the idea and concept of the nature of human which is basically based on the concept of individualism. This global point of view has had the greatest impact on the traditions of economy and challenges the Westerns capability to take apart their independence and individuality based path of understanding the nature of human and the individual recognition from the perspective of collectivism (Hasin et al., 2005, pp. 59-75).

The American Association of Psychiatry (APA) - so called American Psychological Association Medical - already had introduced a classification of mental disorders about many years before disorders, initially for the purpose of statistical research. Since APA began to take charge of future publications, which are now called *Diagnostic and Statistical Manual of*

Mental Disorders or DSM only. This diagnostic and statistical manual is utilized all over the globe by many professionals such as psychologists, clinicians, policy makers and researchers as well as psychiatric agencies of drug regulation, pharmaceutical organizations, and insurance organizations (Tackett et al., 2009, pp. 687-713). These manuals are the alternatives of different editions of the International Classification of Diseases, ICD, produced by the WHO (World Health Organization), whose aim is to exceed the DSM as it represents a classification of all form of diseases. Thus, the mental disorders represent only a subset of that whole, while the DSM specifically addresses this sphere. The first is an alternative to DSM ICD-6, which by first introduced a section for mental disorders. To date six versions of the manual were published: DSM-I (1952), DSM-II (1968), DSM-III (1980), DSM-III-R (1987), DSM-IV (1994) and DSM-IV-TR (2000). The next edition DSM- V (2013) is scheduled for the year 2013 and already has generated much controversy. These DSM basically intends to focus on maintaining the process of communication among the appraisal and diagnosis of patient (Nestadt et al., 2006, pp. 54-62).

The History and revisions of the DSM

The manual was first published in 1952, but since the shift of civilization and the social and political transformations of society throughout the world there have been several updated versions of the manual. The details of all six version of DSM are given below:

DSM-I (1952)

The first and foremost edition of the DSM published in 1952. This was when the manual was designed for clinical traditional perspectives and mental institutions. Since World War II began, it shifted the focus from mental institutions to the assessment and treatment of soldiers. A lot of US psychiatrists were very involved in the change of interest and with that,

the committee led by William Menniger developed *Medical 203* a classification scheme founded in 1943. It was proposed that the DSM abandoned the groundwork outline of standard in attempting to current notions of mental agitation. The DSM-I listed *one- hundred and six mental disorders* and was 130 pages long (Nestadt et al., 2006, pp. 54-62).

DSM-II (1968), (1974)

The second version of DSM published in the year 1968. This revision contained more mental disorders than the first DSM manual. It proclaimed *seventy-six* extra mental disorders making it a total of one-hundred and eighty two disorders and it was 134 pages long. In DSM-II appear the first attempts to establish parameters for classification of an individual in different categories, although some of these parameters are abstract or incipient. Due to some of the controversy like listing of homosexuality as a mental illness, the DSM- II was again printed in the year 1974. At the annual conferences of APA between the time period 1970 and 1973 gay activist protested. In 1974, homosexuality was no longer classed and categorised as a mental disorder in the diagnostic statistical manual (Ozer et al., 2008).

DSM-III (1980), DSM-III-R (1987)

The main aim of this revision was to improve the validity and the uniformity of psychiatric disorders due to numerous critiques which consist of the famous Rosenhan experiment. They also needed to regulate different practices of diagnosis with the United States and other international countries identified differences diagnosis's between Europe and the United States. The psychodynamic view was discarded and a main objective was to support the classification in colloquial English descriptive language. A new multi-axial system was introduced in order to defer an image more acquiescent to a statistical population consensus than an easy identification and analysis. Many new categories of mental disorders

were launched in the DSM and in order to deal and test the effectiveness and reliability of the new diagnosis the NIMH (National Institute of Mental Health), sponsored field trials between the period of 1977 and 1979 (Merikangas et al., 2010, pp. 75-81).

Controversy struck with the removal of the concept of neurosis which is part of the mainstream psychoanalytic theory and therapy that is criticised as being indistinct and unscientific by the DSM task force. The DSM-III would undergo difficulty being commended by the APA board if neurosis was not implemented in the manual to some extent or way. They agreed in the replacement of neurosis with the word parentheses. The DSM had a total of two-hundred and sixty-five categories and was 494 pages long. The manual was successful internationally and was widely used around the world; it was deemed a 'revolution in psychiatry.' A revision of the DSM-III in 1987, had some minor changes and included more disorders (27) new disorders, six categories were removed and sexual orientation disturbance was discarded and submitted under the 'persistently marked distress about one's orientation. This revision included 292 disorders and was 567 pages long (Kessler et al., 2005, pp. 593-602).

DSM-IV (1994), DSM-IV-TR (2000),

This version of the manual had a relevant change from the previous revisions of the DSMs, the DSM-IV included a scientific and experimental implication principle and standard to most of the types which needed symptoms cause 'clinical significant distress/impairment in social occupation or other important areas of functioning.' The manual altogether had two-hundred and ninety seven disorders and 886 pages long. A text revision of DSM-IV was published in 2000 and this included more details on each form of diagnosis and updates as well as the diagnostic codes to keep up with the ICD (Birmingham et al., 2005, pp. 143-146).

Categorization

The categorical classification system was exhibited by DSM- IV, the categories have a model and prototype and patients were claimed to have the disorder if they demonstrated to have the close inference to that form of prototype. Each disorder category had a numeric form of code taken from the coding system of ICD that is also utilised in different purposes of administration and insurance and health services.

The Multi-axial System

This system is made up of five levels connected to diverse features of disability and disorder;

- Axis I: Clinical disorders including the main learning and mental disorders (Anxiety disorders, depression, bipolar disorders, ADHD, ASD and schizophrenia.)
- Axis II: Personality disorders and mental retardation disorders (Borderline personality disorders, narcissist personality disorders and obsessive compulsive disorders)
- Axis III: Physical disorders and acute mental conditions (Brain injuries or medical/physical disorders that intensify existing diseases)
- Axis IV: Environmental and psychosocial factors contributing to the disorder
- Axis V: Children's global assessment scale for children and teens under the age of 18 years old.

DSM-5 (2013); Perspective of ADS 'Neuro-developmental Disorders' and Criteria

The DSM- V published in the year 2013. The DSM-V explains that the autism spectrum disorders are characterised by 'personal deficits in social reciprocity, nonverbal communicative behaviours used for social interaction and skills in developing maintaining and understanding relationships.' (DSM-V 2013: 50) Autistic spectrum disorders have several different names like pervasive developmental disorder and in this case it is grouped or clustered with many other disorders such as ADHD. In the recent revision of the DSM-V, autism spectrum disorders come under 'Neuro-developmental disorder' (Widiger and Samuel, 2005, p.494).

What is considered very useful in the DSM-5 are the tables describing the severity levels for intellectual disabilities (IDD) there are four severity levels; mild moderate severe and profound and descriptions on where the disorders affect each area of the individual's life. These being conceptual, social and practical (DSM-V 2013:34). The severity tables; these severity tables are very useful as they show the levels of severity of ASD, and the effect it has in three domains; conceptual, social and practical. It describes the characteristics in each domain. For example the moderate ASD table demonstrates;

Conceptual domain	<p>Individual's conceptual skills lag markedly behind those of peers. For school age children progress in reading, writing, mathematics and understanding of time and money occurs slowly...for adults, academic skills development is typically at elementary level, and support is required for all use of academic skills in work and personal life. Ongoing assistance on a daily basis is needed to complete conceptual tasks of day to day life, and others may take over these responsibilities fully for the individual.'</p>
Social domain	<p>The individual shows marked differences from social and communicative behaviour across development. Spoken language is typically a primary tool for social communication but is much complex than that of peers. Capacity for relationships is evident in ties to family and friends...However; individuals may not perceive or interpret social cues accurately. Social judgement and decision making abilities are limited and caretakers must assist on life decisions. Friendships with typically developing peers are often affected by communication or social limitations. Significant social communicative support is needed in work settings for success.'</p>
Practical domain	<p>' the individual can care for personal needs involving eating, dressing, elimination and hygiene as an adult, although an extended period of teaching and time is needed for the individual to become independent in these areas...Independent employment in jobs that require limited conceptual and communication skills can be achieved, but considerable support from co-workers, supervisors are needed to manage social expectations, job complexities, and ancillary responsibilities such as scheduling transportation, health benefits and money management...'</p>

The DSM-5 considers the Specific learning disabilities as a type of neurodevelopmental disorder that compromises the ability to learn specific academic skills (e.g., reading, writing and arithmetic), which are the basis of other academic skills. Learning difficulties are ‘unexpected’ taking into account other aspects of development that appear to be fine. The first signs of learning difficulties can arise at the time of pre-school (e.g., difficulty in learning the names of letters or count objects), but can only be diagnosed reliably after starting formal education (Hasin et al., 2006, pp. 59-75). The specific learning disabilities are seen as a transcultural and chronic condition that often persists into adulthood, albeit with cultural differences and developmental changes in how learning difficulties are manifested. For example, in different countries, children struggle with learning the correspondence between letters and sounds in order to decode single words accurately, while adults may have mastered the basic skills of decoding, but read slowly and effort. On the other hand, in countries with a non-alphabetic language or that the correspondence between speech sounds and the letters used to represent these sounds is much simpler than in English, children with ASD (e.g., dyslexia) learn quickly letter-sound correspondence, but both children and adults struggling with reading fluency (Hasin et al., 2006, pp. 59-75).

The specific learning disabilities fit on a clinical diagnosis that is not necessarily synonymous with “learning difficulties”, as identified in the school system, i.e., not all children with learning disabilities / difficulties identified by the school system will have a diagnosis of specific learning disabilities is such as defined in DSM-5. Moreover, it is expected that those with a diagnosis of DEA (Specific learning disabilities) according to the DSM-5 are contemplated by the educational setting (Hasin et al., 2006, pp. 59-75).

The diagnostic criteria of the DSM-5 for the specific learning disabilities reflects two major changes, each of which requiring other changes: (i) A broad category of specific learning disabilities “specifiers” to characterize the specific manifestations of learning

disabilities, when evaluation in three major academic areas: reading, writing, math (e.g., learning disability harm in reading) and (ii) elimination of the requirement in the IQ-achievement discrepancy and its replacement by four criteria, which everyone should be met:

Criterion A: Refers to the key characteristics of specific learning disabilities (at least one of the six symptoms of learning difficulties, which must persist for at least six months, despite extra help or specific instruction has been provided).

Criterion B: Refers to the measurement of such characteristics (academic skills are affected substantially and quantifiably lower than expected for age and cause difficulties in school activities, professional or daily, confirmed by individually administered standardized performance measures and clinical assessment aspect).

Criterion C: Refers to the age at onset of problems (during school age, although they may manifest itself fully only in adulthood in some individuals).

Criterion D: Clarify which disorders (problems with intellectual deficit, auditory or uncorrected visual acuity, and other mental or neurological disorders) or adverse conditions (psychosocial adversity, lack of proficiency in the language of instruction, insufficient instruction) that must be deleted before a diagnosis of DEA can be confirmed.

It is expected that these changes will have an impact on clinical practice, clinical research, in education, in professional organizations and advocacy groups with Learning Disabilities as well as in individuals with learning disabilities, their families and as the perception the community has of the learning disabilities. A substantial change in practice imposes itself because there changes in subtypes of learning disabilities (Reading Disorder, Mathematics Disorder, Disorder of Written Expression) for a comprehensive category. For clinicians and researchers, this change will entail a comprehensive review of academic skills and may reduce the challenges associated with defining the subtype of learning disabilities (for example, when test scores vary in different domains or academic tests, with scores below

the clinical threshold). Instead, the specifiers can be used to characterize more precisely the range of problems present for the review. The identification of a single comprehensive category of learning disabilities is compatible with various school systems in the learning disabilities are outlined as eligible for special education, and other services specific funding category.

This change may help reduce confusion for parents and educators as “additional” learning disabilities are identified in later school years, and help them better understand the developmental changes in the manifestation of the specific learning disabilities, which are, in part, triggered by growing demand the process of curricular learning (e.g., difficulties in the beginning, in reading isolated words are often followed by difficulties in learning aspects related to math, spelling problems and difficulties in reading comprehension, vocabulary problems including the mathematics). However, this change may also require recycling in medical, school psychologists and educators to identify and understand this conceptualization of learning disabilities and how to create learning paths for each student with different learning disabilities (Widiger and Samuel, 2005, p. 494).

It is expected that this change will lead to a better alignment of practices between communities of clinicians and educators. Does this change will have a negative impact on individuals diagnosed with dyslexia or dyscalculia, about professional organizations or support groups (e.g., the International Dyslexia Association)? It should, once these terms may be used to specify the nature of each specific learning disability, according to individual preferences. Furthermore, the requirement to use specifiers to characterize the range of academic abilities affected by dyslexia can raise awareness that ‘dyslexia’ typically encompasses much more difficulties than those related to decoding and spelling of words (Widiger and Samuel, 2005, p. 494).

The second practice change is indicated by the abandonment of the criterion of IQ-achievement discrepancy as well as the omission of deficits in cognitive processing in diagnostic criteria. The discrepancy model has served for decades as the fundamental conceptualization of AD, despite strong evidence that, conceptually and statistically, is fallible. Thus, although the intellectual evaluation was for decades the core of psychological assessment for AD, it is no longer necessary for a diagnosis of DEA, according to the DSM-5. Similarly, the DSM-5, there is no requirement for time consuming and costly neuropsychological assessment of cognitive processing skills to diagnose specific learning disabilities: this evaluation can provide information about contingency plans, but is not required for diagnosis (Widiger and Samuel, 2005, p. 494). This means that psychologists may change “diagnostic review” to “review for intervention” and may have more time to provide a psych education and advice to parents and teachers. For the educational system, the elimination of IQ-discrepancy criterion achievement may mean that it will be possible to provide special education services to children with ASD and lower IQ (e.g. IQ score above 70 ± 5), but do not have an intellectual disability. Given the intervention, these children are similar to those which children with ASD and higher IQ scores have answer.

A third modification relates to the new criteria (particularly the A and B), which require evidence of persistence of symptoms and use of a wide range of data that can be used to confirm and quantify low academic performance. Unlike what happened with the DSM-IV, the psychometric data alone are insufficient for the diagnosis of specific learning disabilities according to the DSM-5. Closer collaboration between educators, doctors and parents will be required to have access to formal and informal school records, school records, educational path, as well as information concerning the psycho-pedagogical and clinical evaluations. A closer and more systematic among physicians, educators, parents and the individual with

ASD collaboration can lead to less confusion and frustration and better results when run through both worlds (clinical and educational) (Widiger and Samuel, 2005, p. 494).

International Classification of Diseases-10 and its difference with DSM

Classification of diseases can be defined as a system of columns, in which specific disease entities are included in accordance with the criteria. The purpose of the ICD is to create conditions for a systematic registration, interpretation, comparison and analysis of data on decency or standards and incidence obtained in diverse regions and countries and at altered and changed times (Johnson et al., 2006, pp.700-708).

ICD is used to convert verbal formulation of diagnoses diseases and other problems related to health, in alphanumeric codes, which provide for easy storage, analysis and retrieval. ICD- 10 is designed primarily for Classification of Diseases and injuries having an official diagnosis. However, not every problem or reason access to health care facilities may be identified with the formal diagnosis. Therefore, the ICD provides the ability to handle Data on a wide variety of signs, symptoms, deviations found in the research process, complaints, social circumstances that may specified instead of diagnosis in the medical record (Mitchell et al., 2011, pp.160-174). Through this ICD can be used for the classification of the data included in these graphs as “diagnosis”, “ hospitalization cause”, “treatment”, “reason for seeking care, “which are available in a variety of medical records retrieved from statistical data and other kinds of health information. The World Health Organization published the ICD and it is utilized globally and internationally for the statistical purposes related to the reimbursement systems, mortality and morbidity, and automated decisions stands in medicines. ICD-10 was developed in 1992 and its purpose was to track mortality statistics. “The heart of” ICD-10 is a three-digit alphanumeric digital code, which is a compulsory level of encoding data mortality that some countries provide to WHO, as well as

conducting major international comparisons (Rief and Isaac, 2007, pp. 143-146). Four-digit subheadings, although they are not binding on the reports at the international level, recommended for many purposes and are an integral part of the ICD-10, as special lists for statistical development. There are two major classifications of groups. Classification of the first group is covering data related to the diagnosis and health, and are built directly by the ICD using special lists for statistical development recommended for international comparisons and publications. This group also includes the classification adapted for narrow specialists. Adaptations classifications combine those sections or ICD rubrics that relate to a particular specialty. They saved four-subheadings, and more detail is achieved using a five-digit, and sometimes six-subtopics (Mitchell et al., 2011, pp. 160-174). Some of the major adaptations of classification that are currently operating given below:

- ICD-Oncology;
- ICD-Dermatology;
- ICD-Dental business and dentistry;
- ICD-Neurology;
- ICD-Rheumatology and Orthopaedics;
- ICD-Paediatrics;
- ICD-Mental disorders.

The second group Classifications covers different aspects relating to health problems that do not fit into formal diagnoses currently known states, as well as other classifications relating to health care:

- International classification of procedures in medicine;
- International Classification of Impairments

Western mainstream approach of Autism spectrum disorders (ASD)

According to the Happe (1994, pp. 17), Wing (1988) proposed the Autistic Spectrum disorders. Autism spectrum of disorders is capturing the concept of different variety of demonstrations of the same handicap. The researches have mentioned that the ASD (Autism Spectrum disorder) is basically a situation and condition that influences the communication, social interaction, behaviour and interests of individuals. Autism spectrum disorder includes childhood autism and Asperger Syndrome. The term neurodiverse or autism spectrum condition is the terms which are also utilised.

ASD is the new generic term that includes different disorders like autistic disorder, Pervasive Developmental Disorder - Not Otherwise Specified (PDD- NOS), and Asperger's Syndrome, and the syndrome Rett (SR) and childhood disintegrative disorder (CDD). Formerly called "pervasive developmental disorders" have neurological disorders that primarily affect social relationships and communication in children. These disorders are also manifested by the appearance of atypical behaviours (unusual) and the development of narrow interests in young or adult.

The extent and form of syndrome, the level of severity and the level of operation vary from person to person and these individuals face different difficulties related to behaviour, communication and social interaction. It is noticed that the people with the ASD have the problem to communicate and interact with other people. They may also have the interests, unusual behaviour and activities. Autism spectrum disorders are a cluster of disabilities related to development that can cause vital and important social deficits at the level of behavioural and communicational challenges. Individuals with this spectrum of disorders contribute to some identical symptoms, for instance social interaction issues. But there are differentiation in the timing of onset, severity of what they have, and the real picture of the

symptoms. The findings from different studies revealed that there are basically three form of ASD (Autism Spectrum disorders):

Autism “classic” People with this disorder usually have a language significantly delayed, social deficits and communications, behaviours and unusual interests. Many people with the disorder autism also have an intellectual disability.

The second type is Asperger Syndrome. People with the Asperger’s syndrome usually have some milder symptoms of autistic disorder. They might have social deficits with behaviours and low common interest. However, they typically do not have delayed language or intellectual disability.

The third type is a developmental disorder dominant - PDD-NOS said, also called “atypical autism.” Patients respond to some of criteria used in autistic disorder or Asperger syndrome, but not all. People with such disorders usually have few symptoms and are lighter than those with classic autism. These disorders are classified by DSM in the category of developmental disorders since the publication of DSM-III in 1981.

The structure of Autistic Spectrum disorder is a harmony of impairments; communication, imagination, and social interaction, pooled with the repetitive and flexible behavioural patterns. The onset is usually during the first three years of life (0-3yrs) but problems can emerge later on during childhood (Serefoglu et al., 2010, pp. 810-815). The triad can be seen in all levels and can transpire together or alone with other psychological or physical disorders. The ICD (International classification of diseases), coin the disorder as a whole ‘ pervasive developmental disorders’ But the United Kingdom use and prefer the term ‘Autistic Spectrum disorder’.

The founding fathers of Autism

This was first characterised by Kanner (1943), who first called the disorder ‘infantile autism’ his initial criteria for this diagnosis was ‘social aloofness and elaborate repetitive

routines.’ (Wing, 1996:327) He studied a group of children between the ages of 0-3 years old. In later research the criterion developed other features and other disorders, Aspergers syndrome was among these disorders under the triad. It is a unique and separate disorder occurring in children with relatively normal developmental conditions. Wing et al (1996) describes AS - ‘a condition characterised by borderline normal IQ, social isolation or naive inappropriate social interaction, intensive interest in one or two subjects and a narrow repetitive life-style.’ (1996:327) other researchers tend to consider Aspergers syndrome as ‘a possibly mild variant of autism in relatively bright children.’ (Gillberg 1989)

Autism is one of a group of neurobiological disorders that is recognized as a pervasive developmental disorder by the American Psychiatric Association (APA). In fact, autism is generally explained as a condition that includes destruction in social interaction and communication with recurring, stereotypical, or restricted patterns of behaviour that hinder student’s interactions and learning. It is interesting to know that symptoms of autism usually appear at the age of 3 where difficulties in learning language and deficiency in communications can be identified in a child. However, symptoms may appear in children at later stages of life but symptoms in this case also endorse the early childhood conditions that were ignored in childhood or during the early years of development (Koegel & Koegel, 2006).

Further, it is also a fact that there was no regulations and authorization for different brain disorders including Autism before 1990. This means, children with autism were given labels of mental retardation, emotional trouble, or even “other health impaired” when determined by schools for the need of special education services. In other words, these labels did not truly identify the needs of a child with Autism. However, after the implementation of the Individuals with Disabilities Education Act (IDEA) in 1990, autism was added as a diagnostic category for school systems. In addition, it is also important to discuss that in

1986, the passage of Public Law 99-457 required school systems to provide services to children with special needs between ages 3 to 5 and encouraged the provision of services to children under the age of 3. This caused a significant delay in the provision of services to children identified with autism. Further, the intensity and type of services were also not defined in these laws, and this has led to continued controversy regarding appropriate programming (Baldwin, 2010).

Hans Asperger described a similar case of autism within a group of children in 1944; he observed the group who were considered suffering from ‘autistic psychopathy.’ These group of children displayed similar symptoms of Kenner’s description of autism but they had better abilities ‘his cases appear to have had better language abilities, more motor difficulties and perhaps more original thinking capacities than Kanner’s subjects.’ (Happe: 1994:83)

Wing (1981) was the first to use the term ‘Asperger’s syndrome’ and was able to recognise capable individuals who displayed features of autism of a mild form. She constructed six symptoms based on the diagnostic criteria proposed by Asperger in 1944;

1. Speech
2. Non-verbal communication
3. Social interaction
4. Resistance to change
5. Motor coordination
6. Skills and interest.

No doubt, autism can be seen as a physical condition but it is also a reality that any biological as well as chemical abnormality of the brain causes autism in children. As far as other causes are concerned, it is also a fact that genetic factors cannot be avoided. In addition, there are some main causes that have been identified by the researchers as possible causes for

Autism including factors associated with child's prenatal or perinatal environment, mercury poisoning, diet issues or sensitiveness to vaccines (Matson et al., 2009).

Gillberg and Gillberg (1989), identified six symptoms used to help diagnose Aspergers syndrome;

1. *Severe impairment in mutual social interaction showing; a) inability to interact or play mutually with age peers, b) a lack of normal desire to be in the company of others the same age, c) a lack of appreciation of social cues, resulting in odd social or emotional and inappropriate behaviour, usually thought to reflect 'coldness' 'stiffness' 'bluntness and 'immaturity. Also extreme egocentricity of unintentional play acting (such as movies from the early stage.)*
2. *An all absorbing restricted interest in a subject e.g. meteorology, astronomy or Greek history. These interests may change in content throughout the years, but its fundamental style remains in terms of extremities, it excludes most other activities and is adhered to in a repetitive way and relies on rote memory rather than meaning and connection.*
3. *A stereotyped way of trying to introduce and impose routines or particular interest in all or almost all aspects of ordinary life.*
4. *Speech and language problems show as a) delayed language development as compared with expected given the child's social background b) superficially perfect expressive language with a strong tendency to become formal and pedantic and flat, staccato-prosody c) mild or moderate impairment of language comprehension with concrete misinterpretations of spoken language against a background of much better expressive language skills.*
5. *Non-verbal communication problems, with limited or clumsy gestures and little or inappropriate facial expressions*
6. *Motor clumsiness in neuro-development.*

Challenges and Criticism of the DSM in the West

DSM is facing number of challenges and criticism in the West. Some of the challenges and criticisms are highlighted in this part of the dissertation. Different challenges and criticism are given below:

Misdiagnosing of Women; Wing and Gould (2011) 'triad of impairments' DSM IV vs. DSM-V

Wing and Gould point out the assessments between the DSM IV and DSM V and looks at the challenges or problems with the future more recent revision of DSM-V which was published in the month of May 2013. The article explains about the transformations being made to criteria for the symptoms of autistic spectrum disorders. The DSM-V has seemed to reduce and simplify the 'triad of impairment' that helps to comprise and structure the autistic spectrum. They argue that the DSM-V cut out the vital or prominent symptom of the triad. With these simplifications and arrangements being made, Wing et al fear that the DSM-V will misdiagnose individuals particularly women and girls. Over the years with emerging experience of autism, it has becomes obvious and apparent to those present in the field that numerous women and girls with the situations of ASD have a medical and clinical picture that fluctuates in some paths from those in men and boys (Gillberg et al., 2010) making the process of diagnosis can be additional and extra hard in some of the cases. This should be discussed in the DSM-V (Marqueling and Zane, 2005, pp. 92-102).

ASD is tends to occur predominantly in Males, so the idea of gender differences can definitely be taken into account. Wing refers to 'a clinical picture' being different between girls and boys. What are the differences? It can be suggested that future research should focus on gender differences in ASD. Wing et al also focuses on the structure of the DSM and mentions the changes of sub groups and categories being changed in order to improve the DSM.

International Classification of Diseases-10

This manual like the DSM, is mentioned here as a comparison to the DSM-V. This tool was comprised by the WHO in 1990 and there have been ten revisions. The current revision, the international statistical classification of diseases and related health problems 10th revision (ICD-10) version for 2010, has a section or chapter for mental and behavioural disorders and they all have their own codes. For mental and behavioural disorders the code is (F00-F99). The chapter consists of blocks that list all types of mental disorders. In the ICD-10 autism spectrum disorders comes under mental retardation (F70-F79). The ICD-10 is more statistical so its focus is not to explain or give descriptions of diagnosis. It is categorised in a numerical way.

Reliability and Validity of the DSM

The most important form of DSM criticism alarms the reliability and validity of the DSM diagnosis. Psychiatrist Niall McLaren criticize that there is lacking in the validity of DSM because it has no link with the settled scientific mental disorder model and therefore the decisions taken were also not proper and scientific ones. It is also observed that there were also the issues of reliability related to DSM because diverse nature of diagnoses contribute to different criteria, and what actually appear to be innovative form of criteria are frequently just the paraphrasing of the identical and same concepts and idea. This means that the decision to assign one form of diagnosis or other form of diagnosis to an individual is to some degree a matter of individual discrimination. The DSM proponents also argue that the inter-rater dependability and consistency of the Diagnostic and Statistical Manual of Mental Disorders diagnoses is acceptable, and that there is effective and useful evidence of different prototypes of behavioural, neurological and mental dysfunction to which the disorders of DSM communicate and match up well. However, it is accepted that there is a huge findings related

to the range of reliability in different studies and that the DSM validity is not clear because, given the lack of diagnostic laboratory or Neuro-imaging tests, standard clinical interviews are “inherently limited” and only a (“flawed”) “best estimate diagnosis” is possible even with full assessment of all data over time. In future revisions of the DSM, it will not only show the signs of symptoms of mental disorders but also find the root of these mental disorders no matter how complex and its triggers.

Cultural Bias

Throughout the entire manual the problems of translating mental disorders in a more culturally sensitive light shows it challenges. Researchers claim that ethnic diversity and culture of the individuals tend to be disregarded. American-European outlook is highlighting the problems and the challenges of DSM throughout the western world may demonstrate the problems when researchers or professionals are applying the diagnosis to patients from different cultures and non-western countries.

Throughout looking at the different variations of the diagnostic criteria of Aspergers syndrome and Autism in the Mainstream west, it is important to note, how culturally sensitive is the criteria to be used beyond the west? Will these characteristics from the criteria be positively applied to children from diverse cultures without the alterations of subjective influence? Does this criterion reflect all people around the world? It will be very useful if we can deconstruct the DSM criteria of autism and highlight features that would be considered to be influenced in a diverse cultural setting or community.

What the next chapter will demonstrate is the transformations of psychiatry like the use of ‘trans-cultural psychiatry and its uses in applying cultural context to the DSM, but we could we argue if the changes made to the DSM are enough to justify the full effects of cultural diversity.

CHAPTER 3: LITERATURE REVIEW- DIFFERENT CULTURAL CONSTRUCTION OF AUTISTIC SPECTRUM DISORDERS

Global perspective about Autistic Spectrum disorder

There are number of researches and studies related to the concept of autism around the world. This chapter is mainly discussed the researches of Amaral, Dawson and Geschwind on the different activities of autism around the world. Throughout the years, a lot of advancements and progress involving ASD research has been made not just in the western developing world but internationally all over the world. Autism spectrum disorders have been recognised in various countries and the National autism society are in more than one hundred countries. The stigma of autism has lessened since it was first established and scientific research has been developed in countries in ‘southern and eastern Africa, India, several middle-eastern countries, Mexico and Venezuela’. According to Amaral et al., (2011), the problem is not finding whether ASD exists around the world, but are the prevalence rates of Autism internationally as one of the difficult issues in this complex research is that ASD tends to be inconsistent among countries. The most important thing is to revealed different factors and differences related to culture affect the recognition and occurrence rates of ASD internationally and globally. There is a notion that ASD is a universal disorder that affects anyone despite cultural differences but if universal, the rates among individuals from different cultural backgrounds should be consistent as well but they are not. Why aren’t they? The richness of the country and economic state can be a factor on influence of the inconsistency of ASD being diagnosed in children and adults. ‘Local factors affecting administrative prevalence estimates including poverty, access to services, racial discrimination, stigma, cultural beliefs about the kinds of behaviour are normal and abnormal and a nations health and public health infrastructure.’ (Amaral and Dawson, 2011, p. 115)

This chapter will examine research of ASD from two non-western countries these being Africa and Iran and touch upon international prevalence rates of ASD to highlight the inconsistencies. The comparisons and differences between their cultures and diagnostic symptoms of the autistic spectrum disorders will be mentioned and by doing so, this will either support or go against the notion of DSM being culturally sensitive to all non-western countries.

African research on ASD

One of the distinct problems with African research on autistic spectrum disorders is there is only little research being done about it. To major African communities, this area of mental health doesn't really exist. We have established in the previous chapter the western criteria (DSM-V) of ASD (Autistic Spectrum Disorders) and explored the features and symptoms of this disorder.

The research of Sanua (1984) mentioned that the Autism was just found in only western civilization and western families. The research of Sanua (1984) has convinced us that infantile autism appears to be an illness of western civilization and appears in countries of high technology, where the nuclear family dominates' (1984, p.1). There are number of researchers who mentioned that the autism is on the continuous basis increasing in the western societies. The article of Sanua also mentions and highlights the inconsistency of the 'disorder' amongst non-western countries such as Africa, India and South America. They also found a high prevalence of autism in Japanese families but not in families that were not westernised. 'The rate is high in Japan but only in westernised families.' (1984:1) It also mentions that autism was rare amongst black families. Although they have established links to western culture mentioned in the article, other research has proven otherwise for there has been research carried out that has proven that autism does exist in non-western countries. The

article does carry some significance when looking at the prevalence of autism for it could be said that culture could be the cause of infrequent findings amongst the ethnic minorities in the western world.

In South Africa, a recent research related to the detection of ASD among the Zulu-speaking children between ages 18 to 36 months, indicated that ASD was underdiagnosed by the doctors and these details were seldom mentioned in the educational or clinical records. ASD was more frequent among the males in comparison to females, a pattern common among other regions of the world. Although a relatively small frequency has been identified but Fragile X, Rett Syndrome and Tuberous sclerosis along with other genetic disorders have revealed evidence that they may be linked with the ASD in different parts of Africa. In this region, Epilepsy and Intellectual disability are some of the most common complication which is associated with ASD. Nonetheless, there are certain attributes of ASD in Africa which varies from those of other non-African nation. Some of them include greater number of non-verbal cases, diagnosis at an older age, possibility of contagious aetiologies, and attribution of ASD to the spiritual causes and lack of knowledge of health workers in the detection of the ASD.

Numerous studies in the west have suggested that the use of medication is one of the most effective ways for treating maladaptive behaviours caused by ASD. Along with this, panels of experts in West have reached a mutual agreement that it is important that children suffering from ASD should be exposed to interventions every week for at least 25 hours. The reason for these interventions will be to address the play skill, social communication, language and maladaptive behaviours. It is recommended that these children must be treated with effective ways which includes program for integrated behavioural and development, applied behavioural analysis, picture Exchange Communication System and other interventions catering to the social skills.

However, In Africa, there is no such literature which accommodates controlling ASDs. No knowledge as to how medications are used to treat these children. Special private schools have been established by the parents of children with ASD. These schools provide the opportunity for behavioural interventions. However, the number is limited. Several research papers have been published by Bakare et al. in Nigeria scrutinizing the level of knowledge among the health workers regarding ASD. The paper was based on a questionnaire methodology which led to a surprising result that not only did the health care workers but also the nursing, psychology and medical students in their final year lacked primary knowledge related to autism. This result was further reinforced by other studies conducted by tertiary facilities and this gap of knowledge became evident. While interviewing the families of children suffering from ASD revealed a new side of the story. People also attributed ASD to magical forces, curses and retribution from a much higher and divine power. In South Nigeria, a survey of health care workers led to the result that around 14% believed in preternatural explanations while another 27% considered supernatural explanation for ASD.

An initiative has been taken by International Child Neurology Association (ICNA) which will involve more than 30 sub-Saharan African Nations and help in investigating the current scenario of the diagnosis and management of ASD in this region. The core objectives for this ICNA initiative includes establishing procedures so as to facilitate activities which will strengthen the infrastructure to improve the diagnosis of ASD, practical SOPs must be established to effectively manage ASD medically and establishing procedures for effective behavioural management of ASD. Finally, different research approaches need to be identified to understand the etiology and prevalence of ASD in this region. This initiative taken by ICNA will facilitate a structure to estimate the occurrence of ASD within different countries

of Africa, increased detection and to provide better medical and social facilities to treat children with this disorder.

The researcher Lotter (1978) in his revealed the concept that how valid the western criteria for ASD are towards different cultures, communities and ethnic minority groups. His study is the foundation for the mental health research in ASD in Africa is the ground breaking study. In his study, he studied 20 children from five different countries of the sub-Sahara Africa. The four main aims and objectives of the study of Lotter were:

1. To mention and reveal different possible cases.
2. Second aim of the research was to sub categorise the cases according to how effectively they met the recognition criteria of syndrome.
3. Third aim of this study was to examine and comprehend divergences between different sub groups, and
4. The fourth aim of this research is to relate and equate the strength and occurrence of individual symptoms found in the sample from Africa with found in the sample of British (Lotter, 1978, p. 232).

In order to measure the autistic behaviours of the children selected in the African sample, they used an epidemiological survey from England that consisted of a twenty four item list which came under five categories; speech, social behaviour, peculiarities of movement, peculiarities to hearing and repetitive ritualistic behaviour. The criterion was developed by Creak (1961) and this list of characteristics was crucial in identifying the similarities and the differences in autistic behaviour between the African sample and the British sample group. The study came across some interesting findings when collecting the material particularly with the samples social class, over half the sample group of autistic children in Africa were elite. The term 'elite' in the study meant any of the child who had lived for any particular span in abroad or had born abroad, or the parents of the child had also lived for some time

period lived abroad, or the father of the child has a non-manual form of job. This form of definition characterized and signified, as well as local freedom, a relatively enhanced and improved exposure to the different life ways of West (Lotter: 237). Within the criteria identifying the symptoms of ASD, the African children displayed fewer characteristics compared to the British sample group.

First, the amalgamation of deeds establishing the criteria for autism takes place in the children of Africa (Lotter, 1980). Subsequently, there was a multitude of boys among different adolescents and kids who displaced such form of combined behaviour and such form of demonstration inclined to be more shared and communal among the children of Africa with modest to unadorned cerebral incapacities (Lotter, 1980). Thirdly, there was over- representation of children of different parents of high class both socially and economically among adolescents and kids designated as having features of autism (Lotter, p. 1980). Fourth, there are specific dissimilarities in the occurrence of certain form of deeds and behaviours among the children from west and North America and children from Africa, remarkable of which is stereotypic behavioural range which was noticed to be not so much common in the children of Africa as compare to the other children of West (Lotter, p. 1980). This is important because the stereotypic repertoire of behaviour is an aspect of the main criteria for diagnosing autism spectrum disorders (Lotter, 1980).

This study conducted by Lotter displayed some very interesting findings when exploring childhood autism. The fact that out of 1,312 children being selected to participate in this study and only nine correctly fit the criteria of autism is very questionable. It was would have been of significant use that the revolutionary study was replicated later on. In a lot of African research the primarily target children with autism and there is not a lot of research about young African adults living with autism with the disadvantages of the developing world. If this study was replicated again using young adults the features of ASD would be changed or

varied depending on the spectrum. It is believed to give better insight on the African construction of the autistic spectrum. The prevalence rates are varied across the African continent in the North of Africa; SeifEldin et al (2008) found a greater percentage of autism in two countries Tunisia and Egypt which obviously had an Arab population. The prevalence of autistic spectrum was known to be 36.6% in Egypt and 11.5% in Tunisia. These findings are relatively high compared to Lotter's finding document only 0.7% (Munir and Bakare, 2011, p. 185).

Explanatory models of mental health in Sub Saharan Africa

The models of mental illness (Ems) give great insight on the cultural interpretation of African culture and how they view types of mental illnesses. Patel (1995) article highlights important cultural differences in the explanations of mental health and this would be able to support that the DSM Criteria may not be best suited to determine African diagnosis. Culture is influencing the every aspect of the individual's life. According to van der Walt (1997:3) culture may even influence the character of the individual and thereby to a unique identity of anyone. The researcher believed that people from different cultural backgrounds in encountered different mental issues and problems. The South African society is rich in a variety of cultures, on a unique way together. African professionals and clinicians in the health professions use the ICD-10 and the DSM-IV-TR to diagnose children and adults they too follow the core symptoms of ASD which are impairments in social interaction, communication, restricted interests and repetitive behaviours. The most common symptom found when diagnosing children with ASD in Africa is in one of the core symptoms of impairment of communication where the children are seen to be non-verbal, Belhadj et al 2006 found several cases of this. Approximately 51.2% of nonverbal cases were reported in their clinic and 71.0% of nonverbal communication in patients with ASD was found in

Mankoski et al (2006) study. This finding here demonstrates positively that one of the classic symptoms of ASD is the sign of nonverbal communication. This is somewhat very useful in demonstrating universalism, but research doesn't seem to have consistency with other criterion systems. It seems to be that children in African can only display one feature of autism which is nonverbal communication.

This finding here was very interesting as it seems to have some minor connection to the theory proposed by Sanua (1984) about autism being an illness of western civilization. Approximately 63% of the sample groups of autistic children in Africa were elite. In the entire group of 22 children, 54 per cent were elite, and when the eight children originally excluded on grounds of age were included, 63 per cent of all the 30 children originally selected were elite. (Lotter: 238.) Although the study was able to highlight relevant findings of individual differences such as class and gender etc., it gave no explanation as to why there were such a high percentage of autistic children coming from elite families and the infrequency of prevalence of autism among the African sample and fewer characteristics observed. Despite the minor findings which were not explained, the study was indeed successful in the indication that ASD autism does exist in Africa. Different researches mentioned that there was such a small group of nine children across various African countries that were clinically diagnosed with autism and this number is much unrepresented and could not be used to generalise a whole population. The fact that some of characteristics of autism in the African sample were found to be fewer than the British sample, shows there needs to be more community based research done in autistic symptoms in Africa.

Co-Morbidity

This is when a person displays more than one type of illness. E.g. autism and albinism (the study of 13 year old autistic albino) people could exhibit a combination of mental disorders. This could over shadow and misdiagnose autism. In some of the research on Africa

and autism, it was suggested that a child could exhibit one or more illness and one could be more extreme or obvious than the other. African research has failed to determine the onset or aetiology of autistic spectrum disorders and when it occurs as it is easy to become hidden and symptoms particularly like Asperger's, can be quite subtle. If one illness tends to be more prominent or visible like Albinism, there could be a misdiagnosis and disorders like Asperger's could go unnoticed. This could cause professionals to see and diagnose only one disorder and not be able to determine the other symptoms of the other. This is why it is important for the professionals to obtain the knowledge and understanding of all features of the autistic spectrum.

Cultural influences/factors that may affect prevalence rates of ASD in Africa

Mental health issues are usually given very low priority in health service policies. Although this is changing, African countries are still confronted with so many problems caused by communicable diseases and malnutrition that they have not woken up to the impact of mental disorders. The case study of "The struggle for mental health facilities in Sierra Leone" is used as an example to highlight the cultural and socio-economic factors which affect the progression of this country and their perspective and social construction of mental health. The DSM can only help to determine diagnosis from consistent developing countries and does not take into account the social and economic devastations of war and poverty. In this case we are discussing the war in Sierra Leone and the mental health of child soldiers integrating back into society. It is noticed that around 250,000 children are abused worldwide as soldiers and involved in acts of war. At least 38 conflicting parties in 12 countries are implementing boys and girls as soldiers. UNICEF is committed to the Demobilization of child soldiers and reintegrate of traumatized children. In the case of Sierra Leone war of 1991 to 2002 most of the soldiers of the Sierra Leone took part in atrocities and numerous boys or

girls were pressurised to fight. This act of the society left them in the condition of traumatised. It is noticed that around 400,000 individuals up to the year 2009 being mentally disturb and ill. The case study of Sierra Leone also highlighted that thousands of former soldier children fell into bodily abuse as they try to restrict their memories. In Sierra Leone mental health is almost not present and numerous patients by their own self trying to cure with the assistance of traditional healers. The male and female child soldiers of Sierra Leone encountered analogous stages of most of the exposures of war. The lower rate of adaptive results and higher level of rape were reported by the female child soldiers. Different forms of toxic violence like rape, killing and injuring were linked with predominantly poor results. Even though all girls and boys who encounter the loss of caregivers and also experience rape are in general at risk for different problems related to mental health. Boys' child soldiers in the case of Sierra Leone validated the enhanced and improved level of vulnerability. This shows that the male and female child soldiers in Sierra Leone need more comprehensive and wide-ranging services related to mental health.

In the case of Sierra Leone, the mental health of the former male and female child soldiers was linked with their long run practise of war and the other risk factors related to post-conflict issues, which were partially counterbalance by different post conflict defensive features. They all were at high risk and need proper form of counselling and education because they were completely disturbed. There are number of factors that affect the ASD in Africa. It is revealed from the case and other findings that DSM cannot provide the proper diagnosis needed in African research. It can only provide one characteristic from the criterion of ASD which is non-verbal communication. Aspergers syndrome is found to be quite rare in individuals with a type of ASD and the children in Africa tend to be severely autistic. There is no variety within the spectrum of ASD, and they can only highlight on one main consistent characteristic, non-verbal communication. Every country must formulate a mental health

policy based on its own social and cultural realities. Such policies must take into account the scope of mental health problems, provide proven and affordable interventions, safeguard patients' rights, and ensure equity.

Autism spectrum disorders in Iran

The first preliminary study to investigate the frequency of ASDs in university students was conducted by Nejatisafa (2003); while the scores were significantly higher for men than women, the results showed the frequency of 120 out of 1000 adult participants (35). In school children, the rate of 19 per 1000 for autistic disorder and 5 per 1000 for Asperger syndrome seem more than the reported ASDs prevalence in developed countries. In this clinical study, no significant correlation was observed between gender and age, diagnosis and severity of the symptoms in ASDs children. The research indicated the brain stem abnormality in severe autistic children which may result in intensifying the autism symptoms. Social interaction and stereotyped behaviours were investigated between autistic and MR children. The results showed higher mean scores of qualitative damage to social interaction and stereotyped behaviours in autistic children compared to MR children.

In pharmacotherapy, typical antipsychotics have been replaced with atypicals that combine dopamine and serotonin receptor antagonist. The effects of pentoxifylline added to risperidone in comparison with placebo plus risperidone in the treatment of autistic disorder. The Aberrant Behaviour Checklist Community Rating Scale indicated lower scores for irritability, lethargy, social withdrawal, stereotyped behaviour, hyperactivity, noncompliance and inappropriate speech in autistic children who used pentoxifylline plus risperidone. Autistic children who received piracetam plus risperidone might have experienced synergistic effects of medications. Topiramate with risperidone demonstrated reduced scores for irritability, stereotypic behaviour, hyperactivity and noncompliance in comparison with using

placebo plus risperidone in autistic children. Combination of celecoxib with risperidone in comparison with risperidone plus placebo caused significant differences between the two groups and the results showed reduced scores for irritability, lethargy and stereotyped behaviours in autistic children. In Iran, home based Iovaas approach was performed for the treatment of ASDs, and the results showed that it was effective in improving the social relationships, speech and language, play and behaviour skills in PDD children. The effect of ABA intervention was demonstrated in autistic children who had acquired significant improvements in behaviours.

The results of another investigation showed that 27.5% of the mothers with autistic children had mental disorders, and a significant correlation was observed between insufficient coping strategies and mental health. It seems that Autism Spectrum Disorders are unknown in developing and developed countries and parents who have children with ASDs suffer from lack of social support. Although several studies have been conducted on ASDs in Iran, still they are not sufficient, especially in ASDs epidemiology and etiology. Because of the essential role of cultural factors in better understanding and improvement of ASDs, more comprehensive researches in prevalence, etiology, diagnosis and treatment of ASDs should be performed in many countries including Iran.

CHAPTER 4: CULTURE AND CULTURAL CRITICISMS OF THE WESTERNERS

DSM

It can be disputed that the processes constructs recognised in the Western psychology have either falsified or ignored a relation of the life true nature in a society of non- Western. For instance the phrase “attitude” may be an altered construct in a distinctive and unique culture from what it would be in a communalist one. This is considered as an illustration of how diverse forms of suppositions and postulations linked with constructs that can direct towards of difficulties of management and cultural conflicts if there is a shortage of awareness of these forms of differences. Euro- American psychology as with other organisations has experienced and undergo from a type of ethnocentrism which basically support and strengthen the power and dominance of different practices of Western management. Civic release as supported and maintained in the society of West maintains a social structure that encourages and upholds the protection and existence of the people, such as the freedom on the individual basis, self-actualisation and right of choice. It is apparent and obvious that the psychology of West and America are introduced with the idea and concept of the nature of human which is basically based on the concept of individualism. This global point of view has had the greatest impact on the traditions of economy and challenges the Westerns capability to take apart their independence and individuality based path of understanding the nature of human and the individual recognition from the perspective of collectivism.

Culture

Culture is said to define common values, norms and beliefs within groups who share the same ethnic heritage socio-economic class or sexual orientation. It can be viewed as an

interactive and creative process entailed with relationships between individuals and their social environment.

Julian Rappaport (1977) proposes three key elements when working with and for groups in communities;

1. Cultural relativism- to understand the basis of people's behaviour and belief systems;
2. The diversity through which we understand and value differences between groups, as well as the inherent strengths and healing systems of those groups;
3. The social ecology of person-environment fit that guides us in developing and delivering services that aid in people's integration (Nelson & Prillettensky: 2010:275)

This theory of culture helps to demonstrate the key ways of helping groups in diverse cultures. Hughes, Seidman and Williams (1993) 'Culture is learnt and transmitted from one generation to the next through the processes of socialization and enculturation.' (Nelson & Prillettensky: 2010:375) they define these term socialization as a process of learning rules and behaviour of their culture through child rearing practices, upbringing and education. Enculturation involves the informal learning of human life in our natural setting. It is an unintentional process that reflects internalization of social regularities and norms required to be a member of society.' (2010:375)

Culture as a discourse

Discourse is understood to be comprised with metaphors, concepts and perspectives which define and describe a particular subject event or even an individual. Discourses contrast from culture to culture or carry diverse statements on the same subject. Cultures can also be visible to being effected by other cultures, for the theory of the 'objective truth' is founded to become very strenuous as different cultures have their own objective truths meaning there are many objective truths. It is essential for us to contemplate that cultures are

dynamic and evolving. Each generation creates their own ways of interpreting particular era of history and the interpretation may differ from another generation.

Social constructionist theory and culture

Social constructionist theory helps in the understanding of cultural diversity and the assumption of dominance of one's cultural attitude compared to another. The key piece to social constructionism is the challenge to see what is seen to be the truth about personal identity, life and the world. In order to find out about our truths of identity and the world the theory stresses that we are not able to do that without the application of language and the use of labels. We all are given a label that affects the way others view us and our social phenomena. Society assigns labels to us with assumptions and expectations. Problems are caused when the expectations are so rooted within societies that they make assumptions and this could cause detrimental effects as the individual are unable to change that label.

Certain form of characteristics are linked with specific groups of individuals and the supposition held about them impacts the deeds and behaviours that other demonstrate them and in different times escorts to prohibiting of certain form of groups from some opportunities and social social activities. For instance, Asians are perceived as good shopkeepers, Africans are perceived as effective athletes, jews as having sharp commerce sharpness, weathy people as being happy and fat individuals as being jolly. According to Burn (1995), in the constructionism no such form of eventual and decisive trusts exists. As an alternatives, there are number of different constructions and truths about the world and contained within the globe. The reality of each individual will base on their norms and beliefs of culture and therefore linked to other circumstances and events (Burn, 1995).

The Debate by Culture

As expected, not all have given an effusive welcome to the new cultural liberalism of the APA. A recent issue of the journal *Transcultural Psychiatry*, for example, was devoted to criticism of what the DSM-IV included the relevance of culture in the diagnosis. Consider these materials, where the voices of some authors who participated in group discussions on culture and diagnosis appear.

To Charles C. Hughes there are several problems with the use of the notion of cultural syndromes. Its definition, Hughes says, is confusing if not misleading. Others have as much as cultural syndromes, the industrialized West has obesity, anorexia nervosa, bulimia, premenstrual syndrome, chronic fatigue, multiple personality disorder, etc. All of which leads to the conclusion that each diagnostic category in the manual requires a consideration of all the cultural factors involved, both from the point of view of the patient and who makes the diagnosis. In his words, “the whole diagnosis process is an activity culturally, and ‘culture’ is as much a factor in shaping particular patterns of symptoms in Western society as it is anywhere else. From this perspective, we suggest that all diagnostic categories need a section on its cultural content in Western society as well as in all other societies “.

The above argument, repeated with slight nuances by other writers, explains why the editors of the APA decided to remove or alter the recommendations of the group of culture in psychiatric diagnosis. Simply put, “any challenge to the basic assumptions underlying nosological the same categories of (...) were neglected disorder”. Or what is the same, “the critique of the universality of the diagnoses specified in DSM-IV was not tolerated or was minimized in the highest degree”. Therefore, the editors chose to systematically eliminate or de-emphasize the social, cultural variation minimizing, suppressing or expressing in general terms any specific observation. In addition, any “material directly questioned the essential elements of the criteria was ignored or recognized as a mere passing grade change before

class". In a previous publication, R.Lewis-Fernández and A. Kleinman, authors who participated in the number of Transcultural Psychiatry under consideration, were even more emphatic in his criticism. According to them, the editors of DSM-IV were not really interested in cultural validation of the manual, a fact that for these authors is truly disappointing.

Notwithstanding these criticisms, in regard to cultural syndromes as such we must recognize that its inclusion in the DSM-IV has generated significant research agenda that seeks to understand them on their own terms, rather than subsumed into one or more categories Diagnostic. Nor can we dismiss the renewed impetus of DSM-IV to the study of topics such as ritual healing around the world, or the relationship between cultural and psychotherapy.

However, in the case of schizophrenia and other psychotic disorders, Janis Jenkins complains bitterly of how mutilated the recommendations of the culture were. His remarks in front of each symptom criterion were reduced to a minimum. In sum, the DSM-IV always relegated to the background the idea of how culture can structure schizophrenic disorders. When it refers to culture, this appears as an exotic, curious belief. To the extent that there is a conceptual difference between what anthropologists and psychiatrists understand the nature of culture. "The process of writing the DSM-IV" concludes Jenkins - "We certainly provide a paradigm for the sociology of knowledge case, in which the hegemonic forces of biological psychiatry sometimes break upon the voices of cultural orientation and psychiatrists anthropologists ". Despite all this, Jenkins also recognizes that the DSM-IV represents a step in the right direction, despite its limitations.

In the anthropological literature there are also authors who express their dissatisfaction with the interests of the APA that their nosology has a cross-cultural applicability. For example, in a recent article, "What Makes Hari Run?" Michael Goddard

leaves his lance against the mere possibility of undertaking a project of transcultural psychiatry. According to him, this project would mean that operational changes are appropriate for a medical science that is distinctly Western, in response to non-Western cultural contexts. For Goddard, this is not the case. His reason suggests that an investigation of cultural especificades in the diagnosis and treatment of non-Western patients, one of the goals of transcultural psychiatry, simply neglects consideration of historical, political and economic conditions that allowed the emergence of and psychiatric concept of mental illness in capitalist society paradigm. Neither this project is concerned with critically analyze the applicability of this paradigm and that concept in indigenous societies. Not to mention the practical impediments that exist in the everyday discourse of clinical psychiatry, which leaves the field to explore different cultural contexts or detailed personal life stories. Moreover, the very notion of cultural syndrome not only escapes ethnocentrism that aims to combat, but also “implies the universality of mental illness as a category of disorder and its critical force is directed, presumably, to diagnose problems more that to the cultural, historical and political situation of psychiatry itself “.

In this situation, the option assumes Goddard is thinking “madness” in terms of a social construction. Total Madness Hari represents the confluence of a specific individual praxis and social praxis and over a period of time more or less pronounced. This means that his madness is madness “built” and in that sense is unique, and no DSM-IV that can help you understand. Hari, the offending code basic behaviour in their society, ended up being a mythological figure, an icon, or in the sense Rene Girard, a “scapegoat” especially apt to be sacrificed the altar of social control.

Do not make an effort to find the ideas of a sample of unblemished Goddard relativism of certain anthropological circles. If you stick to it, it would be entirely impossible to generalize about our ethno psychiatry aquelloo called mental illness. This is, of course, a

professional ideology other than the professional ideology of biomedicine sign, and therefore no less debatable. In the words of Byron J. Good, “it seems increasingly clear that a pure cultural relativist argument in the study of psychopathology is naive.” Or in the words of Kleinman, “the extreme relativism of some anthropologist’s antipsychiatry is so horribly like the universalist ideological fundamentalism of some biological psychiatrists”.

However, Goddard is right to point at the confluence of mental illness and distinctive personal and historical praxis collective, as Michel Foucault and several other writers of historical and sociological persuasion have emphasized. This fact does not mean that mental illness does not exist beyond certain historical circumstances and specific socioeconomics. Or try it impossible to generalize about it with a free of a keen Universalist biomedical reductionism. After all, the disruptive social behaviour in terms of individual and collective life is indicated, stigmatized and faced by all human societies. What happens is that our society calls mental illness to certain of these behaviours and existential conditions, and other companies are called by other terms that do not necessarily involve the same concept of disease approximately. Arise in this way the family, but very acute problems of translatability, comparability and commensurability of life experiences and systems of representation of reality considered abnormal, as opposed to those considered as normal through the boundaries that mark the different cultures in an increasingly interconnected world. It is necessary to investigate how these disorders are perceived, experienced and represented cross-culturally, how the link between the personal world and the social world “is mediated by language, symbols, hierarchies of values and aesthetic forms that constitute those pervasive devices cultural ordering of social life “. As stated Jenkins, “the nature of culture is central to all human experience, whether it is normal or if psychopathology. Culture invariably shapes all emotional symptoms, cognitive and behaviour is assessed in encounter diagnosis. “These assumptions have a whole program for cultural psychiatry. In a different

register, another difference in horn shape our society faces these problems is that science hypothesis postulated in many abnormal behaviours a component of dysfunction in the central nervous system. This is one reason precisely why becomes pathological biomedical psychiatry these behaviours. Incidentally, in doing so removes individuals and their families every “guilt” and responsibility “madness”. But it is also clear that as important as these neurophysiological dysfunctions, or even possible neuroanatomical lesions involved, they are not the main “cause” of mental illness, nor should be the only goal in their treatment. To paraphrase Marcel Mauss, mental illness seem to be an example of “total events” characterized by a complex dialectic that involves the biological, psychological and sociocultural, all within a web of cultural representations of the body, the subjectivity, gender, disease, experience and, in general, actually.

Psychiatric Classification and Nature of Mental Illness

This full feature of pathological mental phenomena and the difficulty to apprehend intellectually are exposed in the argument offered by the DSM-IV on the definition of mental illness. The first is that the manual provides mental apologize for using the term, which continues in use it “did not find a suitable substitute.” This is because it can lead to the view the mind as distinct from the physical or organic, an expression of “reductionistic anachronism of mind / body dualism” dualism certainly the DSM-IV does not accept. However, it continues to recognize that in fact a definition that specifies the precise boundaries or even possible to present a workable definition cannot be achieved. Despite this, he continued with the use of the definition of mental illness already used in its predecessors, the DSM-III (published in 1980) and DSM-III-R:

“Each of the mental disorders is conceptualized as a psychological syndrome or clinically significant behaviour or pattern that occurs in an individual and that is associated

with this state of distress (e.g. pain a symptom) or disability (i.e., impairment in one or several areas of functioning of the individual), or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom. In addition, this syndrome or pattern not should be merely a response expected stable and culturally sanctioned against a particular event, e.g., death of a loved one. Whatever its original causes, it must actually be considered as a manifestation of a psychological dysfunction, biological or behaviour in the individual. Neither deviant behaviour (e.g. political, religious or sexual) nor conflicts that are primarily between the individual and society are mental disorders unless the deviation or conflict is a symptom of dysfunction in the individual, as it is defined above “.

The above considerations certainly problematic make clear four things. The first: mental illness constitute full clinical syndromes, i.e. make pathologies where both certain symptoms as signs of illness come together - all in accordance with the explicit goal of the APA to make psychiatry an integral part of the biomedical, effective medicine since 1980 with the DSM-III. The second: the emphasis is on individual dysfunction, whether psychological, biological or behavioural dysfunction. The third: that dysfunctionality must be meaningful from the point of view clinician, i.e. isolable and describable by a licensed physician, point of view is the supreme arbitrator of mental illness. The fourth: the dysfunctionality must be calibrated in terms of hazards to life and integrity of the subject and its full development in society, all in accordance with a culturally sanctioned legislative system.

In the manual there is, then, a marked preference for the practical instrumental both in the task of diagnosis and empirical research of disorders that were categorized. Therefore, the domains that were considered in making decisions on each of the categories seek above all “clinical utility, confiabilidad, its descriptive validity, the psychometric performance that characterizes the individual criteria, and a number of variables validation “. Always prevailed

a descriptive approach, in an attempt to remain neutral with respect to the different theories that exist about the etiology of mental illness. This last point of descriptive neutrality, free from theoretical or cultural biases, deserves some comments.

In a beautiful piece, Jorge Luis Borges tells us that a certain Chinese encyclopaedia entitled *Celestial Emporium of Benevolent Knowledge*, ran into a classification of animals: “a) belonging to the Emperor, b) embalmed, c) tame, d) sucking pigs, e) sirens, f) fabulous, g) countless stray dogs, h) included in this classification, i) frenzied, j), k) those drawn with a very fine camel hair brush, l) et cetera, m) having just broken the water pitcher, n) that from a distance look like flies”.

Borges point is that no one, not only perfect classification, and essentially any classification, as this encyclopaedia, by absurd that may seem. And it is possible, as Foucault he believes, simply because the list a, b, c, d, n, does appear to all categories as belonging to the same series, puts them on the same plane. In addition, any classification is, at best, provisional and all classificatory system generates its own anomalies and ambiguities. “Well- no classification of the universe” - Borges concludes, “That is not arbitrary and conjectural”.

It is no coincidence that several authors, including Foucault, have you appealed to the same quotation from Borges to illustrate the dilemmas that the “qualifying thought,” inspired by the classification of plant species of Linnaeus, has been raised in the course of human thought. For psychiatry, one of the first experimental psychiatrists, Emil Kraepelin (1856-1926), is credited as the leading exponent of this thinking, under its system of field phenomena of psychiatric illness, rather chaotic, in a systematic whole. Freud and his interest focuses on the accuracy of the phenomena of the deep psyche, the unconscious, formed during the experiences in the early stages of development of the subject, and considered ultimately responsible for the pathology and psychological and existential malaise. His interest is therefore to classify symptoms (or syndromes) but in understanding the

psychological processes, and to some extent cultural, responsible for the appearance of these symptoms. All this based on a fundamental distinction between psychotic disorders, located outside the general scope of the therapeutic technique proposed by Freud, psychoanalysis, and neurotic disorders, which are the fundamental curative latter concern. The first disorders bring us in a continuous, to schizophrenia, a manic depressive psychosis, and other forms of mental illness most disturbing from the perspective of the social order. Characteristically, neurotic disorders, lead us to what we commonly known as “normal,” and therefore did not cease from troubling shadows and fill the lives of their suffering.

Position Found

Despite the efforts of the DSM-IV, the discussion about the nature of mental illness is still as polarized into two camps. The first brings together supporters confront the study of mental illness from the point of view of natural science. Mental illnesses are essentially biological realities, and research should be directed to unravel the many mysteries that still enclose the functioning of the central nervous system of humans. The second are those who seek to understand mental illness as the result of a social construction. Those who link to this review are likely to investigate the social and cultural conditions that enable the genesis of mental illness, and thus to study the historicity of the notion of mental illness (see a recent example in reference. And it is not surprising that the first of the sides most of the hosts are recruited from the natural sciences, especially biomedicine, while the rival armies are you made up of sociologists, anthropologists and historians of psychiatry, mainly.

In a still fresh work, Len Bowers accepts the debate that biomedical psychiatry poses the position on the social construction of mental illness. After an intellectual adventure in the field of radical anthropologists working in mental illness, historians of psychiatry who follow the teachings, including Michel Foucault, the anti-psychiatry movement, in short, all those

given to any attempt to relativize to universalize the findings of neuroscience research with arguments intercultural court, Bowers concedes that the constructivist position has certain arguments in its favour. However, these arguments are far, he says, overshadowed by the arguments against his case. Consider first the latter.

No evidence for forces, factors or social and cultural definitions of mental illness out the possibility of eventually finding Physiological causes for many of them. Even if we admit that the determining factor in mental disorders is social, it does not mean that the social is irreconcilable with the physiological. What happens is that many of these explanations that seek to make mental illness a social, historic and culturally relative matter, containing a moral and political rather than a theoretical point of view front view of the phenomenon. In other words, the constructivist program is not so much a program of empirical research, as a program of political and moral critique of biomedical psychiatry. And this review, as reviewed, is itself valid.

However, empirical research that advances biomedical psychiatry is important. She contributes to help with getting better psychotropic drugs, for example, many people worldwide afflicted with suffering, pain associated stigma and mental illness. Psychiatry, in short, not forming a “police force” camouflaged or something, engaged in some sort of plot repressor of difference or dissent, and thus homogenizing customs, ways of being and feeling, or ideological systems. Although sometimes has become just that, and this completely dissimilar political and social media. So it was in Argentina or Brazil of recent military dictatorships. Or in the former Soviet Union, where political dissent was transformed by the regime in mental illness. Moreover, it may well be that psychiatry fall into the role of “social engineering”, concerned with mere rehabilitation and re-assimilation of suffering the social division of labour, and the medicalization of certain concurrent dramas with the human condition or the realities social and political force, and here should remember the criticism

“stress disorder post-traumatic co” as an attempt to circumvent medically human suffering and pain arising from factors beyond areas of medicine.

Consider now the case for constructivist case. There is a direct sense in which mental illness itself is the product of a social construction: mental illness is doomed nominally, from the word for human beings, and in that sense is immersed in the “language games” according Wittgenstein allow human beings talk about the world. The problem then becomes that of assessing how well our language “corresponds to the realities of the world and how much we can achieve effectively with the tools he provides us”.

In a recent editorial in the American Journal of Psychiatry, Gary J. Tucker acknowledges the latter point (40). For Tucker, the DSM-IV do the current goal of the psychiatric clinic “could be ruining the essence of psychiatry.” Consequently, his call is for the voices of the suffering, narratives of illness, more heard. It is necessary therefore reintroduce empathy as the key to understanding the patient. “So” - Tucker concludes, “it’s time to combine the empirical psychiatry DSM-IV with the life story and the actual observation of the patient both the one and the other should be included in our diagnostic process both are needed in effective care of the patient, which is what ultimately is about. “ But there is another sense that testifies that social dimension of any mental illness. This has to do with the fact that it is only possible identification and determination of mental illness based on social criteria.

Problem with the DSM-III lack of cultural sensitivity

The DSM was constructed by the American psychiatric association so it is important to mention the transformations of psychiatry and its challenges. Without the cultural challenges of psychiatry, it would not integrated cultural factors or influences to diagnosis when trying to improve the DSM’s cultural sensitivity. The first three revisions of the DSM,

had little or none of cultural inclusions of ethnic diversity or influences in making diagnosis, so when the fourth revision was released (DSM-IV), it was better suited as it included more cultural suggestions or interpretation. ‘Unfortunately the DSM-III offered little in a way of acknowledgement of or guidelines for the incorporation of cultural factors in the diagnostic process. The greater cultural sensitivity of DSM-IV marks a significant improvement over the previous editions’ (Smart & Smart 1997: 392)

There were no representations of ethnic minority among the DSM task force. The DSM-IV marked improvements with incorporating cultural procedures and information acknowledging cultural differences and with that it included five new categories which describe cultural relevance in the diagnostic process. The five culturally sensitive changes are;

1. An account of precise cultural characteristics that may be present in a variety of disorders.
2. Twenty-five culture-bound syndromes provided in the glossary
3. A summary of cultural arrangement intended to help professionals to evaluate the impact of the patient’s cultural background.
4. An expansion to the definition of axis IV
5. The inclusion of culturally sensitive ‘V’ codes

Although advisors of the DSM task force such as Kleinman and Fernandez (1995) had made some changes to the DSM-IV, they agree that work still needs to be done in improving the cultural sensitivity. Here are the culture changes made to increasing the cultural sensitivity of the DSM. The study conducted by Rohde (2002), is a very useful example in determining whether the DSM-IV is culturally sensitive in diagnosing ADHD in diverse

countries and developing countries like Brazil. In order to apply the DSM-IV criteria of ADHD to a developing country such as Brazil, Rohde (2002) predicted two outcomes;

1. The findings from clinical research might not be the same findings found in developing countries in Europe and America. This could be due to either genetic variability that may not subsist among cultures classified by the DSM in one culture but might not be seen in another.
2. The findings from clinical research will be similar to the research found in developed countries, suggesting the classification system is suitable for different cultures. If this is true, the cross-cultural or external validity of the DSM-IV criteria of ADHD will be considered relatively high. (Rohde:2002:1131)

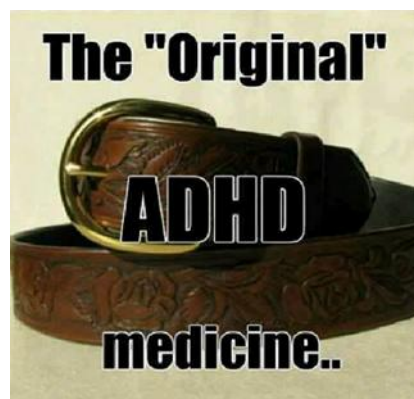
Studies and research data were conducted by Rohde's out patients program at schools in Brazil. Despite finding positive results of ADHD in Brazilian children which matched the DSM's criteria, Rhode's highlighted some cultural and demographic factors which could inhibit the diagnoses of ADHD. He mentions the notion of the 'detection of false positive cases' and proposes this could be due to the child's living conditions and resources. 'A substantial proportion of children in Brazil and other South American countries are exposed to dysfunctional families and to inadequate educational systems. In addition, many youths in these countries live in very poor environments, where even an adequate food supply is not available.' (Rohdes: 2002:1132) it has been proven that malnourished children are at higher risk of attention deficits. It suggested from clinical experience that comprehension of parameters in developing countries should be mandatory.

Another cause of a false detection of positive cases of ADHD is from the exaggeration of symptoms made by the parents or caregiver of the child. Due to the scarcity of mental health services in developing countries, parents would over emphasize of the symptoms of their child so they are able to be seen first. '...because mental health services are so scarce in

developing countries, making treatment available only for the most severe cases, parents tend to overemphasize the severity of ADHD symptoms in their children to guarantee access to treatment. Otherwise, they will be part of long waiting lists.’ (Rhodes 2002:1133)

Rhodes in the article mentions the conceptualisation of ADHD in Brazilian Latin culture; they believe that behaviour disorder is connected to bad manners and poor upbringing from parents.

‘The Original ADHD medicine’



This image is a good example of how different countries conceptualise the epidemiology of ADHD. It supports the notion of a behavioural disorder being connected to bad behaviour. In non-western countries like Africa, they believe that when children are misbehaving to stop the bad behaviour a good beating will hinder the behaviour occurring. The belt was a popular item used to hit children when they were misbehaving like other items like the ‘wooden spoon’ and ‘Cain.’ Where other cultures see this tool as a way of reinforcing discipline, other cultures see it as child cruelty.

Brazil is a developing country with a diverse culture which is different to western culture. This article is useful when questioning the cultural sensitivity of the DSM, the article concludes that the DSM-IV criteria for ADHD can be used in other developing countries but professional have to consider the child's culture 'our clinical research data primarily suggests that the DSM-IV criteria for ADHD may be suitable for a developing countries like Brazil, However, to perform cultures which are culturally tuned, clinicians should be familiar both with standards for normal and deviant behaviours and with the conceptualization of the disorder in the child's culture.' (Rohdes: 2002:1133)

CHAPTER 5: CONCLUSION

In the nut shell, this research study is based on the idea that DSM is culturally sensitive to diversity across cultures. The findings of the research mentioned that Autism is not a single disorder but a spectrum of problems, ranging in intensity and type. Autism is a syndrome characterized by changes present from a very early age, typically before the age of three, and that is always characterized by qualitative shifts in communication, social interaction and the use of imagination. Autistic spectrum disorder has not been proven to affect all people from every country and from every culture, but all over the world prevalence rates are inconsistent. Due to the lack of health facilities and the country's economic status, they are not able to see opportunity and social change in their community. Professionals who choose to work in developing countries, are not able to help a lot of the developing world. Sierra Leone is one of those developing countries which were devastated by the civil war and to this day the people are struggling to survive. Some individuals believe the country is 'cursed' as many other African countries have strived for improvement and success in developing their country like Nigeria and Ghana.

However, Sierra Leone remains the same and many use the word 'un-progressive'. This country was once colonised by the British and is one of the most resourceful countries in the world and yet the common civilian is treated and lives like an animal. After the 10 year civil war which ended in 2002, the amount of trauma that the civilians would have suffered is indescribable and yet, it is also noticed that there were no one mental counselling service and mental health facility to help enable these people. They only have the general hospital. To the local, depression, post-traumatic stress, ADHD and Autistic spectrum disorders do not exist.

Although it has been proven in many other African countries that these mental disorders do exist, how can the DSM be applied to a culture to which their belief system

believes mental health doesn't exist? A lot of their explanations to mental health in a lot of African countries are seen to be demonic, evil and referenced to stupidity. They believe in wrong doings and 'sins of the father' sayings. Their explanations are spiritual and the community or public do not require the knowledge and awareness in terms of dealing with this complex area of health. The individual sufferers of mental disorders have no place in society and are left at home with their families or are out on the streets. This research revealed that how can the DSM be able to reflect positively across Sierra-Leone culture and take into account the countries historical devastation of the civil war when determining positive diagnosis of a mental disorder? And the emphasis of the research was on the importance of cultural community based interventions and tools are crucial.

REFERENCES

- Baldwin, J. L. (2010). *Autism: Encyclopedia of Educational Reform and Dissent*. Thousand Oaks, CA: SAGE Publications.
- Barbaro, J., & Dissamaya, L. (2009). Autism spectrum disorders in infancy and toddlerhood: A review of the evidence on early signs, early identification tools and early diagnosis. *Journal of Developmental and Behavioral Paediatrics*, 30, 447–459.
- Barnes, Jerry “pops”, (2011), “*What are the warning signs of autism in children?*”, Columbus Times, Data retrieved from <http://search.proquest.com.ezproxy.apollolibrary.com/socialsciences/docview/871802690/13CE183390734282519/14?accountid=35812>.
- Begley, S., (2012) New high in U.S. autism rates inspires renewed debate, Data retrieved on 7th Nov, 2012, from: <http://www.reuters.com/article/2012/03/29/us-autism-idUSBRE82S0P320120329>
- Billstedt, E., Gillberg, I. C., & Gillberg, C. (2007). Autism in adults: Symptom patterns and early childhood predictors: Use of the DISCO in a community sample followed from childhood. *Journal of Child Psychology and Psychiatry*, 48, 1102–1110.
- Birmingham, C. L., Su, J., Hlynsky, J. A., Goldner, E. M., & Gao, M. (2005). The mortality rate from anorexia nervosa. *International Journal of Eating Disorders*, 38(2), 143–146.
- Bondy, A., & Frost, A. (2003). Communication strategies for visual learners. In O. I. Lovaas (Ed.), *Teaching individuals with developmental delays: Basic intervention techniques*, Austin, TX: Pro-Ed.
- Brown, T. A., & Barlow, D. H. (2005). Dimensional versus categorical classification of mental disorders in the fifth edition of the *Diagnostic and statistical manual of*

- mental disorders and beyond: Comment on the special section. *Journal of Abnormal Psychology*, 114(4), 551.
- Bury, M. (2001). Illness Narratives: Fact or Fiction?. *Sociology of Health and Illness*, Vol. 23.
- Coleman, M., & Gillberg, C. (in press). *The Autisms*. New York: Oxford University Press.
- Drescher, J. (2010). Queer diagnoses: Parallels and contrasts in the history of homosexuality, gender variance, and the Diagnostic and Statistical Manual. *Archives of Sexual Behavior*, 39(2), 427-460.
- Ecker, C., Marquend, A., Mourcio-Miranda, J., Johnston, P., Daly, E. M., Brammer, M. J., et al. (2010). Describing the brain in five dimensions – magnetic resonance imaging assisted diagnosis of autism spectrum disorder using a multi-parameter classification approach. *Journal of Neuroscience*, 30, 8815–8818.
- Frank, S. & Jeffrey, P. (1985). Survey of Primary 7 / Secondary 1 transfer liaison procedures for children/young people who may have special educational needs. Dundee: Tayside Educational Psychology Service, pp. 45-63.
- Ghaziuddin, M. (2010). Brief report. Should the DSM-V drop Asperger syndrome? *Journal of Autism and Developmental Disorders*, 40, 1146–1148.
- Gillberg, C. (1990). Autism and pervasive developmental disorders. *Journal of Child Psychology and Psychiatry*, 31, 99–119.
- Gillberg, C. L. (1992). The Emmanuel Millar Lecture, 1991. Autism and autistic-like conditions in subclasses among disorders of empathy. *Journal of Child Psychology and Psychiatry*, 33, 813–842.
- Gillberg, C., Ehlers, S., Schaumann, H., Jakobsson, G., Dahlgren, S. O., Lindblom, R., et al. (1990). Autism under age 3 years: A clinical study of 28 children referred fo

r autistic symptoms in infancy. *Journal of Child Psychology and Psychiatry*, 31, 921–934.

Gonzalez Ketty, Cassel Tricia & Boutot E. Amanda (2011), *Overview of Autism Spectrum*

Disorder”, Data retrieved from

<https://ecampus.phoenix.edu/content/eBookLibrary2/content/eReader.aspx?assetMetaId=b19c66ff-0eda-4dc5-882f-04c434ab561b&assetDataId=beac5f34-f7bd-4905-898d-911f8bb16b8b>

Gordon, Andrea. (2012), “*Autism signs not evident in first six months of life: Some babies need repeated screenings past age 2, study says*”, Torstar Syndication Services Ltd,

Data retrieved from

<http://search.proquest.com.ezproxy.apollolibrary.com/socialsciences/docview/1115668931/13CE183390734282519/5?accountid=35812>.

Gould, J. (1982). Social communication and imagination in children with cognitive and language impairments. PhD thesis. University of London.

Happe, F., & Ronald, A. (2009). The ‘fractionable autism triad’: A review of evidence from behavioural, genetic, cognitive and neural research. *Neuropsychology Review*, 18, 287–304.

Hasin, D., Hatzenbuehler, M. L., Keyes, K., & Ogburn, E. (2006). Substance use disorders: Diagnostic and Statistical Manual of Mental Disorders, (DSM-IV) and International Classification of Diseases, (ICD-10). *Addiction*, 101(s1), 59-75.

Hill, P. C., & Pargament, K. I. (2008). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research.

James B. Adams, Stephen M. Edelson, Temple Grandin & Bernard Rimland (2004),”Advice for parents of young autistic children”, Data retrieved from

<http://www.autismtoday.com/adviceforparents.pdf> .

- Johnson, E. O., Roth, T., & Breslau, N. (2006). The association of insomnia with anxiety disorders and depression: exploration of the direction of risk. *Journal of psychiatric Research, 40*(8), 700-708.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry, 62*(6), 593-602.
- Koegel, L. K., Singh, A. K., & Koegel, R. L. (2010). Improving motivation for academics in children with autism. *Journal of Autism and Developmental Disorders*.
- Koegel, R. L. , & Koegel, L. K. (2006). *Pivotal response treatments for autism: Communication, social, and academic development*. Baltimore: CA. Brookes Publications.
- Kopp, S. (2010). Girls with social and/or attention impairments. MD Thesis. Gothenburg: Gothenburg University.
- Kopp, S., & Gillberg, C. (1992). Girls with social deficits and learning problems; autism, Asperger syndrome or a variant of these conditions? *European Child and Adolescent Psychiatry, 1*, 89–99.
- Kopp, S., Kelly, K. B., & Gillberg, C. (2010). Girls with social and/or attention deficits: A descriptive study of 100 clinic attendees. *Journal of Attention Disorders, 14*, 157–181.
- Landa, R. (2007). Early communication development and intervention for children with autism. *Mental Retardation and Developmental Disabilities*.
- Lang, R., O'Reilly, M., Lancioni, G., Rispoli, M., Machalicek, W., Chan, J. M., Langthorne, P., & Franco, J. H. (2009). Discrepancy in functional analysis results across two applied settings: Implications for intervention design. *Journal of Applied Behavior Analysis*.

- Leekam, S. R., Nieto, C., Libby, S. J., Wing, L., & Gould, J. (2007). Describing the sensory abnormalities of children and adults with autism. *Journal of Autism and Developmental Disorders*, 37, 894–910.
- Leekam, S., Libby, S., Wing, L., Gould, J., & Taylor, L. (2002). The diagnostic interview for social and communication disorders: Algorithms for ICD-10 childhood autism and Wing and Gould autistic spectrum disorder. *Journal of Child Psychology and Psychiatry*, 43, 327–342.
- Marqueling, A. L., & Zane, L. T. (2005, June). Depression and suicidal behavior in acne patients treated with isotretinoin: a systematic review. In *Seminars in cutaneous medicine and surgery* (Vol. 24, No. 2, pp. 92-102). WB Saunders.
- Matson, J.L. (2008). *Clinical Assessment and Intervention for Autism Spectrum Disorders (Practical Resources for the Mental Health Professional)*. New York, NY: Academic Press.
- Matson, J.L., Wilkins, J., & Macken, J. (2009). The Relationship of Challenging Behaviors to Severity and Symptoms of Autism Spectrum Disorders. *Journal of Mental Health Research*, Vol. 2.
- Maurice, C., Green, G. & Foxx, R. (2001). *Making a Difference: Behavioral Intervention for Autism*. Boston, MA: Pro Ed Publications.
- Merikangas, K. R., He, J. P., Brody, D., Fisher, P. W., Bourdon, K., & Koretz, D. S. (2010). Prevalence and treatment of mental disorders among US children in the 2001–2004 NHANES. *Pediatrics*, 125(1), 75-81.
- Mitchell, A. J., Chan, M., Bhatti, H., Halton, M., Grassi, L., Johansen, C., & Meader, N. (2011). Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative-care settings: a meta-analysis of 94 interview-based studies. *The lancet oncology*, 12(2), 160-174.

- Myers, S. M., & Johnson, C. P. (2007). American academy of pediatrics council on children with disabilities. Management of children with autism spectrum disorders. *Pediatrics*, 120, 1162–1182.
- National Health Service, UK (2012), Autism and Asperger Syndrome Symptoms, Data retrieved from <http://www.nhs.uk/Conditions/Autistic-spectrum-disorder/Pages/Symptoms.aspx> The National Autistic Society, (2012), Data retrieved from <http://www.autism.org.uk/about-autism/autism-and-asperger-syndrome-an-introduction/what-is-autism.aspx>
- Nestadt, G., Hsu, F. C., Samuels, J., Bienvenu, O. J., Reti, I., Costa Jr, P. T., & Eaton, W. W. (2006). Latent structure of the < i> Diagnostic and Statistical Manual of Mental Disorders, </i> personality disorder criteria. *Comprehensive Psychiatry*, 47(1), 54-62.
- Newson, E., Le Marechal, K., & David, C. (2003). Pathological demand avoidance syndrome: A necessary distinction within the pervasive developmental disorders. *Archives of Disease in Childhood*, 88, 595–600.
- Nygren, G., Hagberg, B., Billstedt, E., Skoglund, A., Gillberg, C., & Johansson, M. (2009). The Swedish version of the Diagnostic Interview for Social and Communication Disorders (DISCO-10). Psychometric properties. *Journal of Autism and Developmental Disorders*, 39, 730–741.
- Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2008, August). Predictors of posttraumatic stress disorder and symptoms in adults: a meta-analysis. In *Annual Meeting of the International Society for Traumatic Stress Studies, 14th, Nov, 1998, Washington, DC, US; This article is based on a paper presented at the aforementioned meeting.* (No. 1, p. 3). Educational Publishing Foundation.
- Rief, W., & Isaac, M. (2007). Are somatoform disorders ‘mental disorders’? A contribution to the current debate. *Current Opinion in Psychiatry*, 20(2), 143-146.

Rogers, J., Viding, E., Blair, J., Frith, U., & Happe, F. (2006). Autism spectrum disorder and psychopathy: Shared cognitive underpinnings or a double hit? *Psychological Medicine*, 36, 1789–1798.

Rogers, S. (2000). Interventions that Facilitate Socialization in Children with Autism. *Journal of Autism and Developmental Disabilities*, Vol. 30.

Rogers, S. (2000). Interventions that facilitate socialization in children with autism. *Journal of Autism and Developmental Disabilities*.

Scheuermann, B., Webber, J., Bouto, E. A., & Goodwin, M. (2003). Problems with personnel preparation in autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*.

Schlosser, R. W., & Wendt, O. (2008). Effects of augmentative and alternative communication intervention on speech production in children with autism: A systematic review. *American Journal of Speech Language Pathology*.

Serefoglu, E. C., Cimen, H. I., Atmaca, A. F., & Balbay, M. D. (2010). The distribution of patients who seek treatment for the complaint of ejaculating prematurely according to the four premature ejaculation syndromes. *The journal of sexual medicine*, 7(2pt1), 810-815.

Siegel, B. (2003). *Helping Children with Autism Learn: Treatment Approaches for Parents and Professionals*. New York: Oxford University Press, pp. 210-222.

Simpson, R.L. et al. (2005). *Autism spectrum disorders: Interventions and treatments for children and youth*. New York, NY: Corwin Press.

Smith, R. (2006). Every Child Matters: the Common Assessment Framework. *Teaching Expertise*. Retrieved from <http://www.teachingexpertise.com/articles/every-child-matters-the-common-assessment-framework-1023> on September 14, 2012.

- Tackett, J. L., Balsis, S., Oltmanns, T. F., & Krueger, R. F. (2009). A unifying perspective on personality pathology across the life span: Developmental considerations for the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders. *Development and psychopathology, 21*(03), 687-713.
- Tincanni, M., Crozier, S., & Alazetta, L. (2006). The picture Exchange Communication System: Effects on manding and speech development for school-aged children with autism. *Education and Training in Developmental Disabilities*.
- Wagner, P. & Gillies, E. (2001). Consultation: A solution-focused approach. In Y. Ajmal & I. Rees (Eds.), *Solutions in schools*. London: BT Press, pp. 24-89
- Wang, S. J., Juang, K. D., Fuh, J. L., & Lu, S. R. (2007). Psychiatric comorbidity and suicide risk in adolescents with chronic daily headache. *Neurology, 68*(18), 1468-1473.
- Weitz, C., Dexter, M., & Moore, J. (1997). AAC and children with developmental disabilities. In S. Glennen & D. De Coste (Eds.), *Handbook of augmentative and alternative communication*, San Diego: Singular.
- Widiger, T. A., & Samuel, D. B. (2005). Diagnostic categories or dimensions? A question for the Diagnostic and statistical manual of mental disorders. *Journal of abnormal psychology, 114*(4), 494.
- Wing, L. (1981a). Language, social and cognitive impairments in autism and severe mental retardation. *Journal of Autism and Developmental Disorders, 10*, 31–44.
- Wing, L. (1981b). Asperger's Syndrome: A clinical account. *Psychological Medicine, 11*, 115–129.
- Wing, L. (1998). The history of Asperger syndrome. In E. Schopler, G. B. Mesibov, & L. J. Kance (Eds.), *Asperger syndrome or high functioning autism?* (pp. 1–28). New York: Plenum.

- Wing, L. (2005). Problems of categorial classification systems. In F. Volkmar, R. Paul, A. Klin, & D. J. Cohen (Eds.), *Handbook of autism and pervasive developmental disorders* (3rd ed., pp. 583–685). New York: Wiley.
- Wing, L., & Gould, J. (1979). Severe impairments of social interaction and associated abnormalities in children. *Epidemiology and classification. Journal of Autism and Developmental Disorders*, 9, 11–29.
- Wing, L., Leekam, S. R., Libby, S. J., Gould, J., & Larcombe, M. (2002). The Diagnostic Interview for Social and Communication Disorders: Background, inter-rater reliability and clinical use. *Journal of Child Psychology and Psychiatry*, 43, 307–325.
- Yirmiya, N., & Charman, T. (2010). The prodrome of autism: Early behavioural and biological signs, regression, peri and post-natal development and genetics. *Journal of Child Psychology and Psychiatry*, 51, 432–458.
- Yoder, P., & Stone, W. L. (2006). A randomized comparison of the effect of two prelinguistic communication interventions on the acquisition of spoken communication in preschoolers with ASD. *Journal of Speech, Language, and Hearing Research*.
- Yoshida, W., Dziobek, I., Kliemann, D., Heekeren, H. R., Friston, K. J., & Dolan, R. J. (2010). Cooperation and heterogeneity of the autistic mind. *Journal of Neuroscience*, 30, 8815–8818.
- Zager D. (2005). *Autism spectrum disorders: identification, education and treatment*. Lawrence Erlbaum Associates.

